

## REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 6, 47 and 48 are amended. Claims 59-62 are added. Claims 1-62 are pending.

### I. Rejection under 35 U.S.C. § 102

In the Office Action, at page 4, numbered paragraph 5, claims 47 and 48 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2003/0179822 to Takano et al. This rejection is respectfully traversed because Takano does not discuss or suggest:

- an analog input port for receiving an analog signal;
- a digital input port for receiving a digital signal; and
- an input port changing unit for switching from the analog input port to the digital input port when the displaying device determines that the analog input port is not receiving a normal analog input signal,

as recited in independent claim 47.

Takano does not discuss or suggest that the displaying device determines that the analog input port is not receiving a normal analog input signal. Takano discusses that in the absence of an intelligent interface, the user of system 100 would have to know at any given moment whether the output of the DVCR 110 was an analog signal or a digital signal, and the user would then have to instruct DTV 105 to select the appropriate analog or digital input.

Takano does not discuss or suggest that the DTV 105 includes an input port changing unit that switches from an analog input port to a digital input port when the DTV 105 determines that the analog input port is not receiving a normal analog input signal or switches from the digital input port to the analog input port when the DTV 105 determines that the digital input port is not receiving normal digital input signal.

Therefore, amended independent claim 47 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(e) rejection is respectfully requested.

Further, Takano does not discuss or suggest "an analog input port for receiving an analog signal; a digital input port for receiving a digital signal; and an input port changing unit for switching from the digital input port to the analog input port when the displaying device determines that the digital input port is not receiving a normal digital input signal," as recited in amended independent claim 48. Therefore, amended independent claim 48 patentably

distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(e) rejection is respectfully requested.

## II. Rejections under 35 U.S.C. § 103

In the Office Action, at page 6, numbered paragraph 8, claims 1-3, 6-8, 11, 12, 14-19, 24-30, 32, 33, 38-46, 49-54 and 56-58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,276,436 to Shaw et al. in view of U.S. Patent No. 6,122,018 to Sugihara et al. This rejection is respectfully traversed because the combination of the teachings of Shaw and Sugihara does not suggest:

- a signal identifying unit that receives an input signal and identifies the type of the input signal;
- a signal checking unit that checks whether the identified input signal is abnormal;
- a data setting unit that sets data corresponding to the identified type of the input signal, the set data representing how to check the identified input signal; and
- a signal changing unit that switches from the checked input signal to a next input signal to be checked based on set data corresponding to the identified type of the input signal so that the signal checking unit checks whether the next input signal is abnormal, if the identified input signal is determined to be abnormal,

as recited in amended independent claim 1.

Shaw discusses a television signal projection system in which a determination is made whether a microprocessor 36 is currently receiving an HSYNC signal from an analog multiplex unit 34. If there is no signal being received, the program causes the analog multiplex control signal MUX CONTROL to be switched allowing the HSYNC and VSYNC signal from another video signal source to be coupled to the microprocessor 36.

While Shaw does discuss checking whether an HSYNC signal is being received, as conceded by the Examiner, Shaw does not discuss or suggest a signal identifying unit that receives an input signal and identifies the type of the input signal and does not discuss or suggest a signal changing unit that switches from the checked input signal to a next input signal to be checked based on set data corresponding to the identified type of the input signal so that the signal checking unit checks whether the next input signal is abnormal, if the identified input signal is determined to be abnormal. Also, Shaw does not discuss or suggest a data setting unit that sets data corresponding to the identified type of the input signal, the set data

representing how to check the identified input signal. The Examiner indicates that Sugihara makes up for the deficiencies in Shaw. The Applicants respectfully disagree.

Sugihara discusses a video display apparatus and method for controlling the switching of external input terminals thereof. In Sugihara, the user operates a remote controller 10 to rewrite a video label while watching the screen, which displays "VIDEO 1" to "VIDEO 5," depending on the input terminal T1-T5. The user performs setting to skip external inputs terminals T2-T5, for example so that external input terminal T1 is set to correspond with video 1 and the external terminals T2-T5 are set to be skipped. After the video label setting has been performed, if the input terminal T2 has been set to be skipped, then the terminal T2 is skipped. If the input terminal T2 has not been set to be skipped, then the input is switched to the external input terminal T2.

First, Sugihara does not discuss or suggest a signal changing unit that switches from the checked input signal to a next input signal to be checked based on set data corresponding to the identified type of the input signal. While the user in Sugihara does set whether an input terminal should be skipped or not, the Sugihara does not suggest that a signal changing unit switches from a first signal to a second signal based on set data corresponding to the identified type of the input signal. Sugihara discusses that the user sets data not corresponding to an identified type of input signal, but sets data based on whether the user chooses for one of the input terminals to be skipped or not. The data is not set based on the identified type of signal, as the user makes no distinction between types of signals, but merely decides whether one input terminal is going to be skipped or not. Thus, the setting of data (i.e., skipping or not skipping) a terminal is not dependent on an identified type of input signal.

In addition, Sugihara does not discuss or suggest that a data setting unit sets data corresponding to the identified type of the input signal, the set data representing how to check the identified input signal. Sugihara does not suggest that an identified type of input signal has data set for the signal, where the data is, for example, a number of times to check the identified signal. Sugihara does not suggest that data is set that represents how the input signal is to be checked.

Therefore, as the combination of the teachings of Shaw and Sugihara does not suggest "a signal identifying unit that receives an input signal and identifies the type of the input signal; a signal checking unit that checks whether the identified input signal is abnormal; a data setting unit that sets data corresponding to the identified type of the input signal, the set data representing how to check the identified input signal; and a signal changing unit that switches

from the checked input signal to a next input signal to be checked based on set data corresponding to the identified type of the input signal so that the signal checking unit checks whether the next input signal is abnormal, if the identified input signal is determined to be abnormal," as recited in amended independent claim 1, claim 1 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

In addition, the combination of the teachings of Shaw and Sugihara does not suggest "receiving the input signal and identifying a type of the input signal that is received; checking whether the identified input signal is abnormal; setting data corresponding to the identified type of the input signal, the set data representing how to check the identified input signal; and switching from the checked input signal to a next input signal to be checked based on the set data corresponding to the identified type of the input signal so that whether the next input signal is abnormal is checked, if the input signal is checked and is determined to be abnormal," as recited in amended independent claim 6. Therefore, claim 6 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Further, the combination of the teachings of Shaw and Sugihara does not suggest that "if the checked input signal is normal, the signal continues being displayed by the display device and if the checked input signal is abnormal, the signal stops being displayed by the display device," as recited in independent claims 11 and 25. Shaw particularly recites that when the microprocessor 36 is not currently receiving an HSYNC signal and if there is no signal being received, that the program processed to cause the analog multiplex control signal MUX CONTROL to be switched allowing the HSYNC and VSYNC signal from another video signal source to be coupled to the microprocessor 36. Shaw does not suggest that if the checked input signal is abnormal, the signal stops being displayed, particularly as Shaw specifically discusses switching to another video signal source if the microprocessor is not receiving the input HSYNC signal.

In contrast, the present invention of claims 11 and 25 requires that the video signal stop being displayed (i.e., that the signal had to have previously been displayed in order for the video signal to now stop being displayed by the display device). The Examiner alleges that col. 9, lines 43-64 explain that if the signal is "abnormal," then the next input signal is checked, *which means that the signal will be stopped from being displayed by the display device.* However, moving to a next signal source when a signal is not received is not stopping the display of the

video signal. Shaw never discusses that the HSYNC signal, which is not received by the microprocessor 36, is displayed. Thus, there is no indication in Shaw that prior to a determination that the HSYNC signal is not being received, that signal is being displayed and is then stopped from being displayed when it is determined that the HSYNC signal is not being received.

Therefore, claims 11 and 25 patentably distinguish over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Additionally, the combination of the teachings of Shaw and Sugihara does not suggest "an input port changing unit for switching from the checked input port to a next input port when the input port is not receiving a normal input signal, wherein at least one of the input ports has priority in an order of checking by the signal checking unit as compared to another input port," as recited in independent claims 40 and 49. Sugihara merely discusses that the user sets whether a specific terminal T1-T5 is to be skipped or not. However, Sugihara does not suggest that one of the input ports has priority in an order of checking by the signal checking unit as compared to another input port. Sugihara discusses only that the user sets whether a specific input terminal is to be skipped or not. However, Sugihara does not suggest that a particular one of the input ports has a priority in an order of checking by the signal checking unit over another. Once a user has entered data as to whether a terminal T1-T5 is to be skipped, then the terminal T1-T5 is either skipped or not. There is no indication that an input port has priority over other input ports in an order of checking by a signal checking unit. Here, the user sets whether a terminal is to be skipped or not. The user setting data for one of the terminals is not the same as the input port having priority at any given time in an order of checking by a signal checking unit.

Further, even assuming, *arguendo*, that the user setting data as to whether a terminal T1-T5 is to be skipped or not could be construed to correspond with one terminal having priority over another terminal, as Sugihara particularly discusses that the terminals which the user has deemed to be skipped are skipped, then Sugihara teaches away from one of the terminals having a priority in an order of checking than other terminals. If the user decides that terminals T2-T5, for example, are to be skipped, then terminal T1 does not have a priority in an order of checking over terminals T2-T5, as terminals T2-T5 are to be skipped. Thus, even if Sugihara were incorporated into Shaw, Shaw still would not suggest that one of the input terminals would have priority in an order of checking as the other input terminals were set by the user to be skipped, and thus would never be checked for whether the HSYNC signal is being received or not.

Therefore, claims 40 and 49 patentably distinguish over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Claims 2, 3, 7, 8, 12, 14-19, 24-30, 32, 33, 38, 39, 41-46, 50-54 and 56-58 depend either directly or indirectly from independent claims 1, 6, 11, 25, 40 and 49 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 3 recites that “the signal checking unit checks whether the identified input signal is abnormal by one of decoding the identified input signal and sensing whether an input signal cable is connected to the display device.” Therefore, claims 2, 3, 7, 8, 12, 14-19, 24-30, 32, 33, 38, 39, 41-46, 50-54 and 56-58 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

In the Office Action, at page 15, numbered paragraph 9, claims 4, 5, 9, 10, 13, 20-23, 31, 34-37 and 55 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Shaw in view of Sugihara, and further in view of U.S. Patent No. 5,808,693 to Yamashita et al. This rejection is respectfully traversed.

As discussed above with respect to independent claims 1, 6, 11, 25 and 49, Takano does not discuss or suggest all the features of independent claims 1, 6, 11, 25 and 49. Yamashita fails to make up for the deficiencies in Takano. Therefore, claims 1, 6, 11, 25 and 49 patentably distinguish over the references relied upon. Claims 4, 5, 9, 10, 13, 20-23, 31, 34-37 and 55 depend either directly or indirectly from independent claims 1, 6, 11, 25 and 49 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the references relied upon. For example, claim 5 recites “a signal controlling unit that checks the position of the checked input signal within the sequence of identified input signals to be checked to determine which identified input signal is to be checked after the checked input signal, wherein the signal changing unit switches from the checked input signal to the determined input signal so that the signal checking unit checks whether the determined input signal is abnormal.” Therefore, claims 4, 5, 9, 10, 13, 20-23, 31, 34-37 and 55 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

### III. New Claims

New claims 59-62 depend either directly or indirectly from independent claims 1, 6, 47 and 48 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the references relied upon. For example, claim

59 recites that "the set data comprises one of a number of times the identified input signal is checked, a time required to check the identified input signal, and a position of the identified input signal to be checked within a sequence of identified input signals to be checked." Therefore, new claims 59-62 are believed to be patentable over the references relied upon for at least the reasons noted above.

### **Conclusion**

In accordance with the foregoing, claims 1, 6, 47 and 48 have been amended. Claims 59-62 have been added. Claims 1-62 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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